

Work Order ID 60168-2

June 28, 2010 11:53:41 AM

Split *shp July 15*



Page 1

Item ID: D4132-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate, RH Fwd

Start Date: 6/29/10 Start Qty: 2.00



Cust Item ID:

Required Date: 7/15/10 Req'd Qty: 2.00

Customer:

Reference:

Run Start



Approvals: Process Plan:

PP

Date: 10/6/29

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4132

A

0.00

100



FLOW WATER JET

0.00

Waterjet

Memo

FLOW CNC Waterjet

1-Cut D4132-1F as per Dwg D4132

Dwg Rev: A

Prog Rev: A

2-Debur if necessary

SB 10/06/30

VB 10-6-29

(3)

110



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

0.00

Quality Control

VB 10-6-29

120



QC8- Inspect parts - second check

0.00

QC

Memo

0.00

Quality Control

SB 10/06/30

(43)

Work Order ID 60168

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Page 2

Item ID: D4132-042
Revision ID:
Item Name: Wearplate, RH Fwd

Accept



Setup

Start



Stop



Start Date: 6/29/10 Start Qty: 2.00

Required Date: 7/15/10 Req'd Qty: 2.00



Cust Item ID:

Customer:

Reference:

Run

Start



Stop



Approvals: Process Plan:
QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Brake NC

Brake NC

Form as per dwg
NC BRAKE

0.00

Memo

0.00

1- Form using DT 8179 Die as per Dwg D4132

dt 9/1/11

ES 10/07/13

③

B 10-07-13 only

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

P 10-07-14 ①

150



Large Fab

Large Fab

Weld per dwg A/R Hardcoat S.S. Batch: 1114705

Large Fab

0.00

Memo

0.00

Weld hard surface using DT NA as per QSI 004 and Dwg D4132

NO TIG

H 10-07-14 1 φ

Work Order ID 60168

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Page 3

Item ID: D4132-042
Revision ID:
Item Name: Wearplate, RH Fwd
Start Date: 6/29/10 Start Qty: 2.00
Required Date: 7/15/10 Req'd Qty: 2.00
Reference:

Accept

Cust Item ID:
Customer:

Setup Start
Stop

Approvals: Process Plan:
QC:

Date:
Date:

Tooling:
SPC (Y/N):

Date:
Date:

Run Start
Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC10- Inspect visual per QSI004- ground welds

0.00

8/20/10

(H)

QC

Quality Control

Memo

0.00

170

QC5- Inspect part completeness to step on W/O

0.00

QC

Quality Control

Memo

0.00

AB 10-07-14

180

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

M 112588

0.00

Memo

START TIME:
OVEN TEMPERATURE:
FINISH TIME:

12:00 320°
12:30

BL 10-7-15

Work Order ID 60168

June 28, 2010 11:53:42 AM



Page 4

Item ID: D4132-042

Accept



Setup Start



Revision ID:

Item Name: Wearplate, RH Fwd

Stop



Start Date: 6/29/10 Start Qty: 2.00



Cust Item ID:

Required Date: 7/15/10 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190



QC

Quality Control

QC3- Inspect Part Finish

0.00

0.00

Memo

200



Small Fab

Small Fab

Memo

0.00

0.00

1- Bond D4132-3 gasket to inner surface of wearplate using a thin layer of 3M
1300/1300L scotch grip adhesive

Batch:

M-11-3174

210



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

Memo

=> m. k 10/07/15 (IX)

10-07-15 (IX)

Work Order ID 60168

June 28, 2010 11:53:43 AM



Page 5

Item ID: D4132-042
Revision ID:
Item Name: Wearplate, RH Fwd

Accept



Setup Start
Stop



Start Date: 6/29/10 Start Qty: 2.00
Required Date: 7/15/10 Req'd Qty: 2.00



Cust Item ID:
Customer:

Reference:

Approvals: Process Plan:
QC:

Date:
Date:

Tooling:
SPC (Y/N):

Date:
Date:

Run Start
Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

| Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---------|--------|-----------|------------|------------|---------------|-------------|
|---------|--------|-----------|------------|------------|---------------|-------------|

220



Packaging

Packaging

Identify as per dwg & Stock Location: _____
Packaging

Memo

0.00

0.00

230



QC

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.00

0.00

EO 10/7/16 ①

1007-16
MF
10-7-16

Picklist Print

June 28, 2010 11:53:40 AM

Page 1

Work Order ID: 60168

Parent Item: D4132-042

Parent Item Name: Wearplate, RH Fwd



Start Date: 6/29/10

Required Date: 7/15/10

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D4132-3 | | Manufactured | No | | | 200 | Each | 0.0000 | 1 | 2 | | | |
| Gasket M304S18GA | | Purchased | No | | | 100 | sf | 132.8779 | 1.555 | 3.273684 | | | |

304/316 .050 Sheet

Location

MAT20

111743
112885
113062

Loc Qty

132.8779
8.86
28.0179
96

Loc Code

113062

M-L 10/07/15

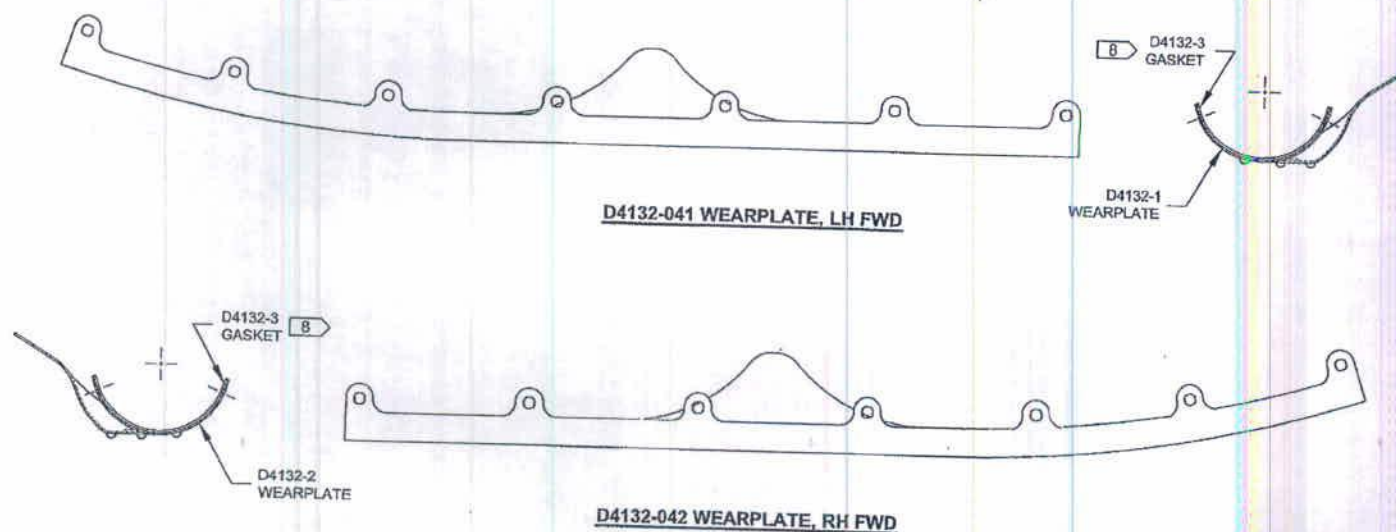
4.66

BIO-B-JA

B

| QTY | QTY | PART NUMBER | DESCRIPTION |
|------|------|--------------|-------------------------|
| -041 | -042 | | |
| X | | D4132-041 | WEARPLATE, LH FWD |
| | X | D4132-042 | WEARPLATE, RH FWD |
| 1 | | D4132-1 | WEARPLATE |
| 1 | 1 | D4132-2 | WEARPLATE |
| 1 | 1 | D4132-3 | GASKET |
| A/R | A/R | 1300 / 1300L | 3M SCOTCH-GRIP ADHESIVE |

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 60168
3810-6-29



RELEASED
2010-06-23
WP

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4132-xxx" USING YELLOW PAINT MARKER ON INSIDE SURFACE
- 7) WEIGHT: -041/-042 = 2.1 lbs
- 8) BOND D4132-3 GASKET TO INNER SURFACE OF WEARPLATE USING A THIN LAYER OF 3M 1300/1300L SCOTCH GRIP ADHESIVE

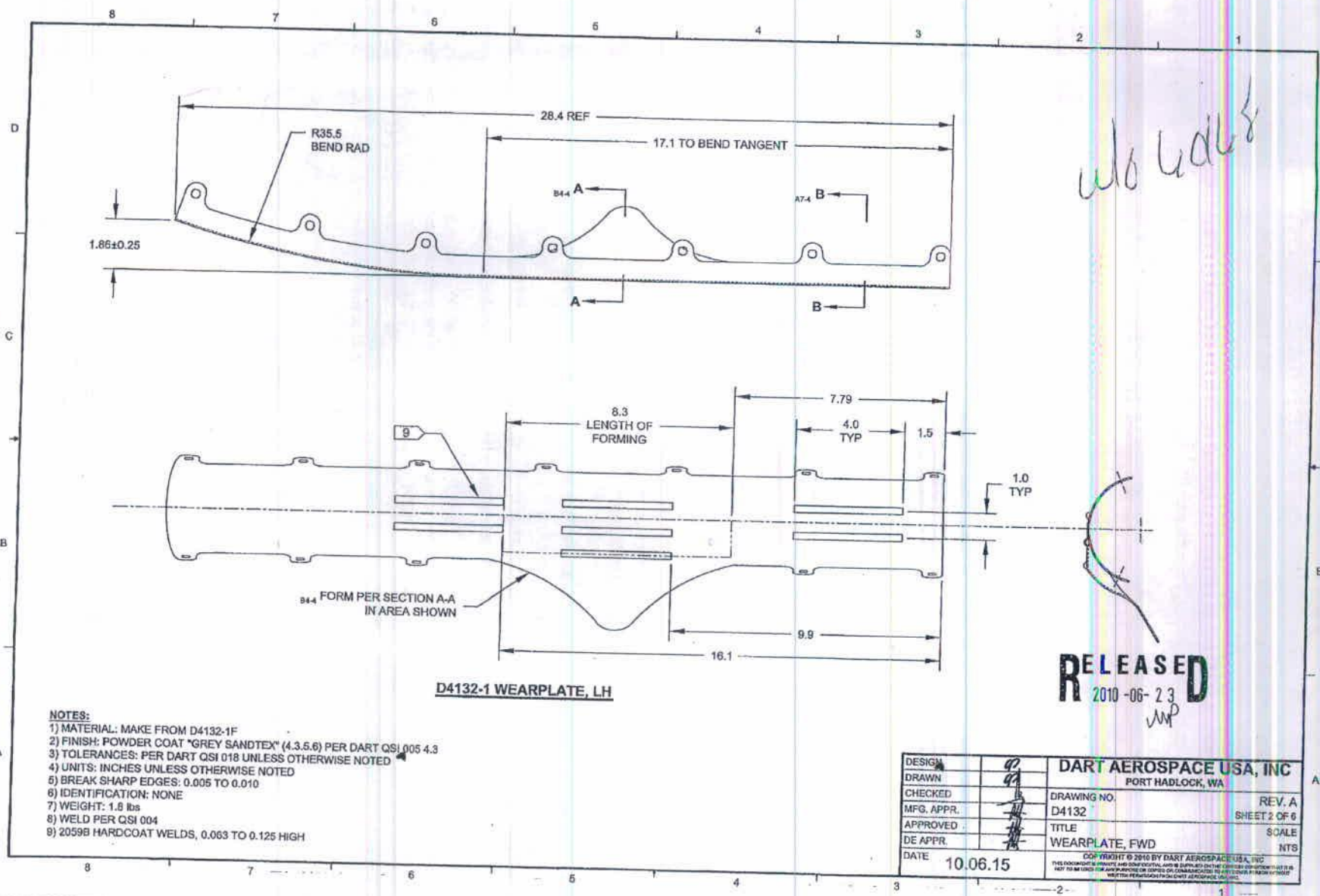
| REV. | NEW ISSUE | DESCRIPTION | CP | 10.06.15 |
|------------|-----------|-------------|----|----------|
| DESIGN | | | BY | DATE |
| DRAWN | | | | |
| CHECKED | | | | |
| MFG. APPR. | | | | |
| APPROVED | | | | |
| DE APPR. | | | | |
| DATE | 10.06.15 | | | |

DART AEROSPACE USA, INC
PORT HADLOCK, WA

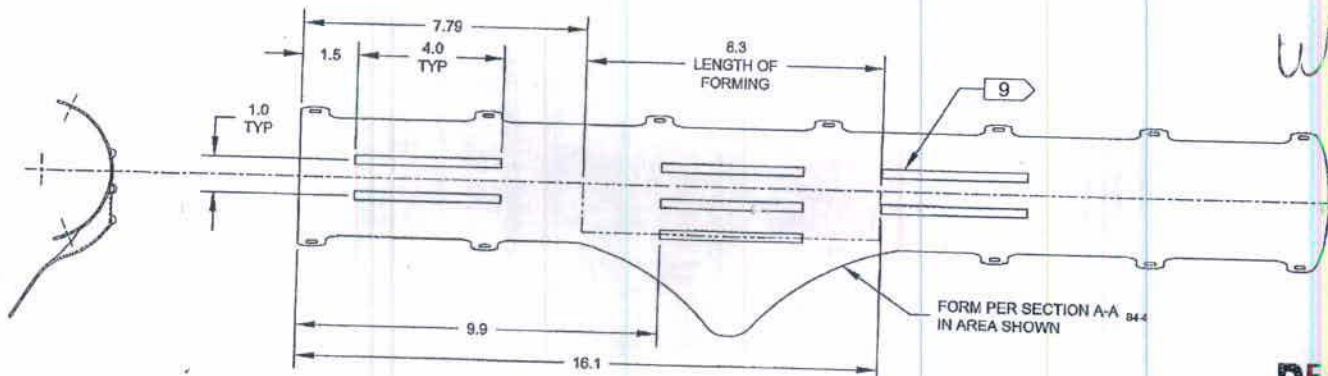
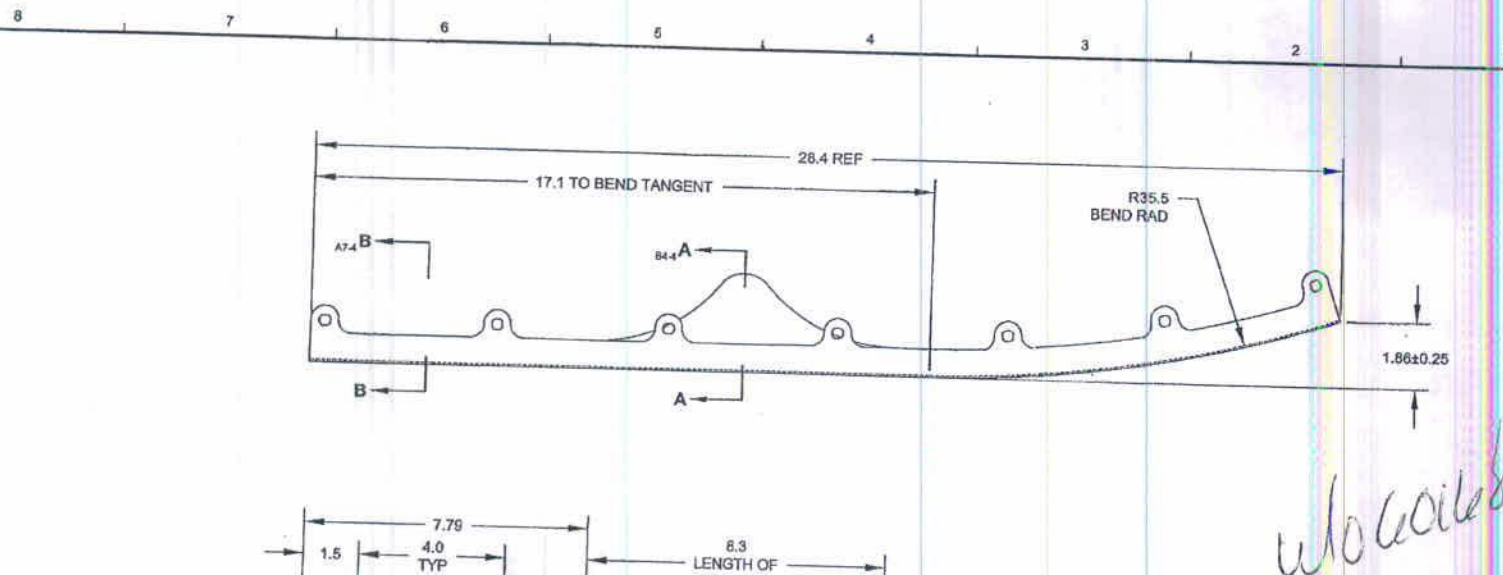
DRAWING NO. REV. A
D4132 SHEET 1 OF 6

TITLE SCALE
WEARPLATE, FWD NTS

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| | | | |
|------------|----------|--|--------------|
| DESIGN | 92 | DART AEROSPACE USA, INC | |
| DRAWN | 92 | PORT HADLOCK, WA | |
| CHECKED | 92 | DRAWING NO. | REV. A |
| MFG. APPR. | 92 | D4132 | SHEET 2 OF 6 |
| APPROVED | 92 | TITLE | SCALE |
| DE APPR. | 92 | WEARPLATE, FWD | NTS |
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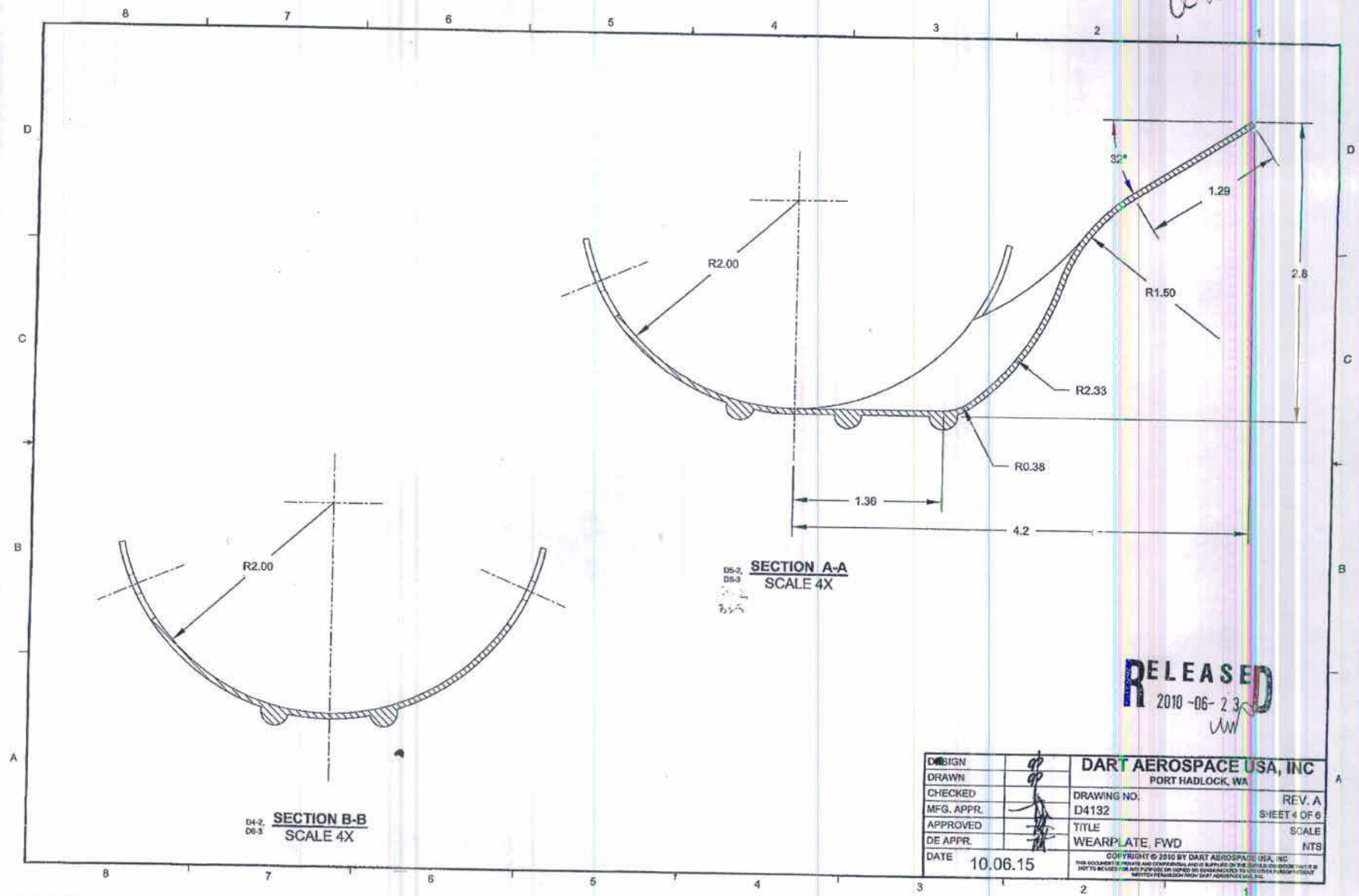
D4132-2 WEARPLATE, RH

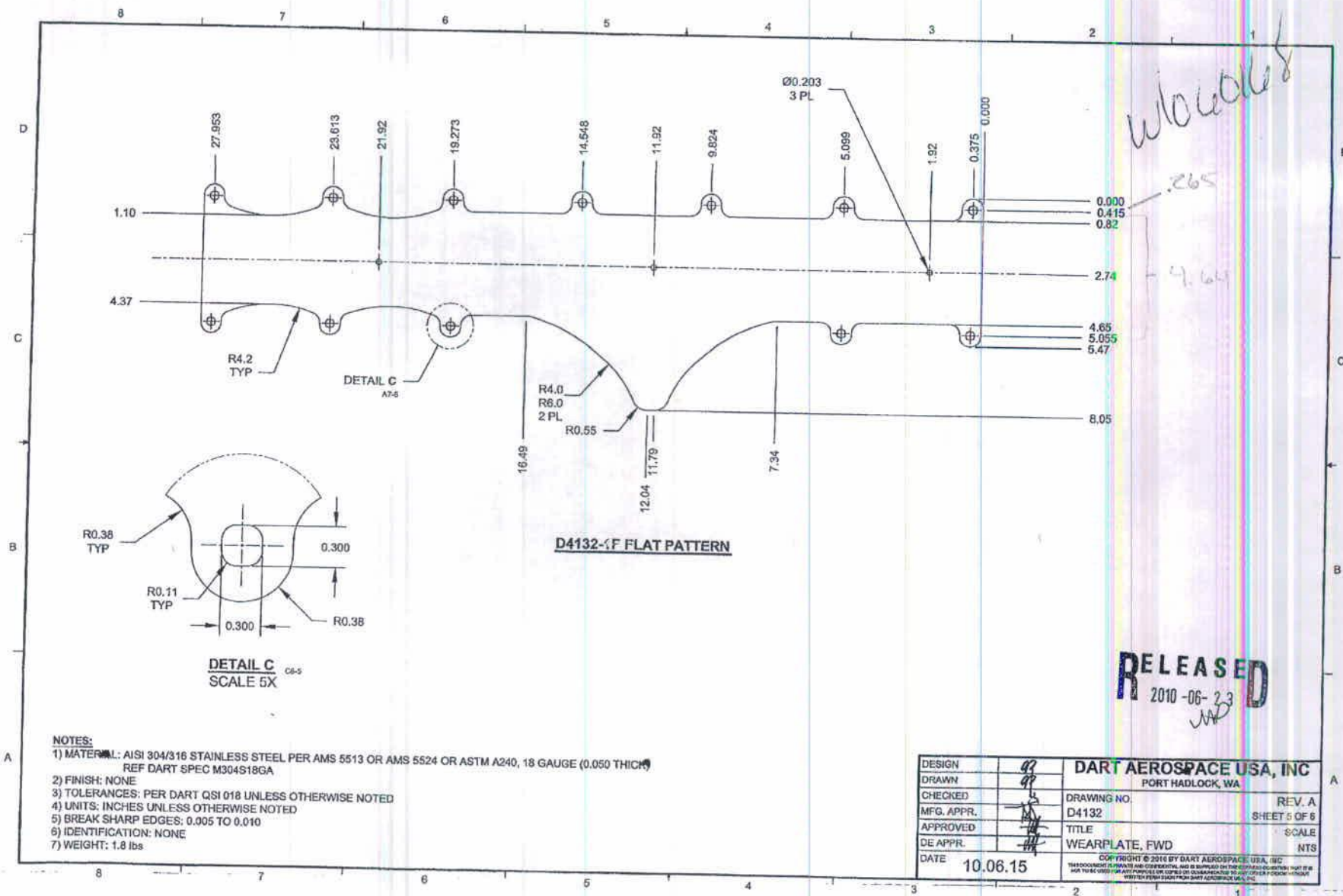
- NOTES:
- 1) MATERIAL: MAKE FROM D4132-1F
 - 2) FINISH: POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 1.8 lbs
 - 8) WELD PER QSI 004
 - 9) 2059B HARDCOAT WELDS, 0.063 TO 0.125 HIGH

RELEASED
2010-06-23
WJ

| | | | |
|------------|----|-------------------------|----------------|
| DESIGN | 92 | DART AEROSPACE USA, INC | REV. A |
| DRAWN | 92 | PORT HADLOCK, WA | SHEET 3 OF 8 |
| CHECKED | h | DRAWING NO. | D4132 |
| MFG. APPR. | h | TITLE | WEARPLATE, FWD |
| APPROVED | h | SCALE | NTS |
| DE APPR. | h | DATE | 10.06.15 |

WLO 60168





| | | |
|--------------------------------|--|------------------------|
| DART AEROSPACE LTD | | Work Order: 60168 |
| Description: WEAR PLATE RH FWD | | Part Number: D4132-040 |
| Inspection Dwg: D4132-1 Rev: A | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| 300X300 | ± .010 | 305X303 | * | | | |
| Ø .703 | ± .005 - .001 | .704 | * | | | |
| .415 | ± .010 | .413 | * | | | |
| .82 | ± .030 | .823 | * | | | |
| 2.74 | ± .030 | 2.731 | * | | | |
| 4.65 | ± .030 | 4.638 | * | | | |
| 5.055 | ± .010 | 5.054 | * | | | |
| 5.47 | ± .030 | 5.467 | * | | | |
| 8.05 | ± .030 | 8.043 | * | | | |
| .375 | ± .010 | .372 | * | | | |
| 1.92 | ± .030 | 1.917 | * | | | |
| 5.099 | ± .030 | 5.099 | * | | | |
| 9.824 | ± .030 | 9.824 | | | | |
| 11.92 | ± .030 | 11.92 | | | | |
| 14.548 | ± .030 | 14.548 | | | | |
| 14.273 | ± .010 | 14.273 | | | | |
| 21.92 | ± .030 | 21.92 | | | | |
| 23.63 | ± .010 | 23.613 | | | | |
| 27.953 | ± .010 | 27.953 | | | | |
| 1.10 | ± .030 | 1.095 | | | | |
| 4.37 | ± .030 | 4.361 | | | | |
| 11.79 | ± .030 | 11.79 | | | | |
| 12.04 | ± .030 | 12.04 | | | | |
| .050 | ± .010 | .050 | | | | |

| | | |
|-----------------|-------------------------|-------------------------|
| Measured by: HB | Audited by: [Signature] | Prototype Approval: N/A |
| Date: 10-6-29 | Date: 10/06/30 | Date: N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|------|-----------|------------|----------|
| A | | New Issue | KJ/JLM | |